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EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,688

Applicant(s)

EMMERINK ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9, 10 and 12 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 11 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/21/2002.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 1/4/2005.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following reason: The description of figure 1 see pages 9-10 should be in Background of the Invention and not in the Detailed Description of the Preferred Embodiments section.

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/069,792 in view of Almay (US 5,953,337).

This is a provisional obviousness-type double patenting rejection.

Regarding claim 1 of the instant application, 10/069,792 claim 4 teaches all the limitations different communications protocols are used on the partial connection links, and a message is transmitted on the partial link directly using a respective communication protocol.

Note, the examiner maintains the limitation message traffic occurs on at least two partial links is found in claim 4 of 10/069,792. The examiner corresponds the applicant's at least

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two partial connection links with the links in claim 4 of 10/069,792. Note, the decentralized devices comprise decentralized switching devices of the transport network (see spec: 10/069,792 pg. 12 lines 16-22). In a connection between two terminals via at least one decentralized device, the partial connection links are the links between the terminals and the decentralized devices and the links between the decentralized devices.

Almay teaches different communications protocols are used on the partial connection links, and a message is transmitted on the partial link directly using a respective communication protocol (HDLC frames converted into ATM cells, col. 2 lines 39-43).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of claim 4 of 10/069,792 by transmitting the data between the end stations and decentralized switches devices using the HDLC protocol and using the ATM protocol to transmit the data between the decentralized switches devices. Converting between HDLC and ATM according to the teachings of Almay can perform this modification. The suggestion for the modification is ATM is a recognized method of traffic distribution wherein the problems of traditional packet

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networks have been solved (Almay: col. 1 lines 6-13) and to allow for high-speed user data to be transmitted to and from the ATM network (Almay: col. 2 lines 39-43).

Regarding claim 2, as previously shown, the transformation from one communication protocol into another communication protocol, the message is initially unpacked from the protocol layers of one protocol and then packed into the protocol layers of the other protocol (Almay: HDLC frames converted into ATM cells using the ATM Adaptation Layer, col. 2 lines 39-43).

Regarding claim 3, as previously shown, HDLC is used during a first communication protocol on a lower protocol layer and an Ethernet or ATM protocol is used during a second communication protocol on a lower layer (Almay: HDLC frames converted into ATM cells using the ATM Adaptation Layer, col. 2 lines 39-43).

5. Claim 5 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the combination of claim 4 of copending Application No. 10/069,792 and Almay in view of Epley (US 6,876,658).

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This is a provisional obviousness-type double patenting rejection.

The combination is silent on a control message transmitted over the transport network.

Epley teaches a control message transmitted over the transport network (ATM switches set up a virtual connection, or virtual circuit between ATM devices, col. 2 lines 20-31).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination by of claim 4 of copending Application No. 10/069,792 and Almay by performing setup according to the teachings of Epley. Having the decentralized switching devices / ATM switches transmit SETUP and CONNECT messages can perform this modification. The suggestion for the modification is in conventional ATM networks setup is performed in this manner (Epley: conventional ATM network, ATM switches set up a virtual connection, or virtual circuit between ATM devices, col. 1 line 66 - col. 2 line 31). This would benefit the network by allowing it to be more easily integrated into larger ATM networks.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (6,222,823) in view of Epley (US 6,876,658) and further in view of Almay (US 5,953,337).

Regarding claim 1, Smith teaches a method for coupling messages of a central control device (fig. 1 box 18, col. 5 lines 1-9) with decentralized communication devices (fig. 1 boxes 12, 16, col. 5 lines 1-9).

Smith teaches transport of communication data performed by at least one functional unit of a communication network (fig. 1 boxes 12, 16, traffic entering the network through one of local switches, col. 5 lines 1-12).

Smith teaches controlling the connection function which is performed by a second functional unit of the communication network (fig. 1 box 18, connection admission control function, col. 5 lines 1-9).

Smith teaches the first (fig. 1 boxes 12, 16) and second functional units (fig. 1 box 18) are spatially separate from each other.

Smith teaches message traffic occurs on at least two partial connection links (fig. 1 see partial connection links between end stations 14 and local switches 12, and local

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switches 12 and transit switch 16, traffic entering the network through one of local switches, col. 5 lines 1-12).

Smith teaches a communication protocol used on the partial connection link (fig. 1, see links between local switches fig. 1 box 12 and transit switch fig. 1 box 16, ATM, col. 5 lines 1-2).

Note, limitations addressed above are also shown in Smith fig. 2.

Although Smith teaches at least one functional unit of a communication network, the reference is silent on setting up and/or clearing down a communication connection by the at least one first functional unit of the communication network.

Epley teaches setting up and/or clearing down a communication connection by the at least one first functional unit (ATM switches, col. 2 lines 20-31) of the communication network (ATM switches set up a virtual connection, or virtual circuit between ATM devices, col. 2 lines 20-31).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Smith by performing setup according to the teachings of Epley. Having the ATM devices transmit SETUP and CONNECT messages can perform this modification. The suggestion for the modification is in conventional ATM networks setup is performed in this manner

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(Epley: conventional ATM network, ATM switches set up a virtual connection, or virtual circuit between ATM devices, col. 1 line 66 - col. 2 line 31). This would benefit the network by allowing it to be more easily integrated into larger ATM networks.

Although the combination of Smith and Epley teaches a communication protocol used on the partial connection link (Smith: fig. 1, ATM, col. 5 lines 1-2), the combination is silent on different communication protocols used on the partial connection links, and a message is transmitted on the partial connection link directly using a respective communication protocol.

Almay teaches different communication protocols used on the partial connection links, and a message is transmitted on the partial connection link directly using a respective communication protocol (HDLC frames converted into ATM cells, col. 2 lines 39-43).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Smith and Epley by transmitting the data between the end stations and local switches (Smith: fig. 1 boxes 14, 12) using the HDLC protocol and using the ATM protocol to transmit the data between the local switches and transit switch (Smith: fig.

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1 boxes 12, 16). Converting between HDLC and ATM according to the teachings of Almay can perform this modification. The suggestion for the modification is to allow for high-speed user data to be transmitted to and from the ATM network (Almay: col. 2 lines 39-43).

Regarding claim 2, as previously shown, the transformation from one communication protocol into another communication protocol, the message is initially unpacked from the protocol layers of one protocol and then packed into the protocol layers of the other protocol (Almay: HDLC frames converted into ATM cells using the ATM Adaptation Layer, col. 2 lines 39-43).

Regarding claim 3, as previously shown, HDLC is used during a first communication protocol on a lower protocol layer and an Ethernet or ATM protocol is used during a second communication protocol on a lower layer (Almay: HDLC frames converted into ATM cells using the ATM Adaptation Layer, col. 2 lines 39-43).

Regarding claim 5, a control message is transmitted as a message. As previously shown with respect to claim 1, Epley teaches SETUP and CONNECT messages being transmitted between the ATM switches (col. 2 lines 20-31).

Regarding claim 6, messages occur from a number of first decentralized devices (Smith: fig. 2 public network 10-1 boxes 12, 16, col. 5 lines 47-56), the messages are transmitted after passing through a first partial connection link (Smith: fig. 2: see link between public networks 10-1 and 10-2, col. 5 lines 47-56) in a second decentralized device (Smith: fig. 2 public network 10-2 boxes 12, 16, col. 5 lines 47-56) in a bundled form (Smith: ATM cells, col. 5 lines 27-31) and on one second partial connection link (Smith: fig. 2: see connection between public network 10-2 and box 14B, col. 5 lines 47-56).

Regarding claim 7, groups of a number of first centralized devices (Smith: fig. 2 public network 10-1 boxes 12, 16) and second decentralized devices (Smith: fig. 2 public network 10-2 boxes 12, 16) are administered (Smith: each network has its own DBC and CAC, col. 5 lines 51-54).

9. Claims 9 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (6,222,823) in view of Almay (US 5,953,337).

Regarding claim 9, Smith teaches a system for coupling messages of a central control device (fig. 1 box 18, col. 5 lines 1-9) with decentralized communication devices (fig. 1 boxes 12, 16, col. 5 lines 1-9).

Smith teaches a transport network for providing a communication connection (fig. 1 see connection between end stations 14 via switches 12, 16, col. 5 lines 1-6).

Smith teaches a control network for controlling the setting-up and/or clearing-down of the communication connection (fig. 1 box 18, 20, connection admission control function, dynamic bandwidth controller, col. 5 lines 6-9). The examiner corresponds the applicant's setting up the communication connection with the connection admission control function and dynamic bandwidth of the reference.

Smith teaches a device to control the setting-up and/or clearing-down of a connection in the transport network by a control network, the device being spatially separate from the transport network (fig. 1 box 18, 20, connection admission control function, dynamic bandwidth controller, col. 5 lines 6-9).

Smith teaches at least one first decentralized communication device to receive and/or issuing a message (fig. 1 box 14, col. 5 lines 3-6).

Smith teaches at least one second decentralized communication device to receive and/or issuing a message (fig. 1 boxes 12, 16, col. 5 lines 3-6).

Smith teaches a central control device to issue and receive messages (fig. 1 box 18, 20, col. 5 lines 6-9, CAC allocate bandwidth, col. 5 lines 20-22).

Smith teaches at least one first communication connection between the first and second communication devices (fig. 1 see connection between box 14 and 12).

Smith teaches a second communication connection between the second decentralized communication device and the central control device (fig. 1 see connection between boxes 12, 16 and 18), the second communication connection being formed as an Internet or ATM network (ATM, col. 5 lines 1-2).

Smith is silent on the first communication connection being formed as an HDLC based connection.

Almay teaches the first communication connection being formed as an HDLC based connection (HDLC frames converted into ATM cells, col. 2 lines 39-43).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Smith by transmitting the data between the end stations and local switches (Smith:

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fig. 1 boxes 14, 12) using the HDLC protocol and using the ATM protocol to transmit the data between the local switches and transit switch (Smith: fig. 1 boxes 12, 16). Converting between HDLC and ATM according to the teachings of Almay can perform this modification. The suggestion for the modification is to allow for high-speed user data to be transmitted to and from the ATM network (Almay: col. 2 lines 39-43).

Regarding claim 12, as previously shown, the second decentralized communication device (Smith: fig. 1 box 12) is in operative connection with a converting device / ATM Adaptation Layer (Almay: HDLC frames converted into ATM cells using an ATM Adaptation Layer, col. 2 lines 39-43), which performs a protocol conversion between communication protocols on the first and second communication connections (Almay: HDLC frames converted into ATM cells col. 2 lines 39-43), for which purpose the messages are unpacked from protocol layers being used and re-packed (Almay: HDLC frames converted into ATM cells, col. 2 lines 39-43).

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10. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Smith and Almay as applied to claim 9 above, and further in view of Mitts (US 5,912,885).

The combination of Smith and Almay is silent on the second communication connection is formed as a coaxial cable or as an optical waveguide.

Mitts teaches cable connection for ATM networks (col. 1 lines 26-27).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination of Smith and Almay by connecting the switches (Smith: fig. 1 boxes 12, 16) to the CAC (fig. 1 box 18) using coaxial cable. This modification would benefit the system since coaxial cable provides a reliable connection between two fixed locations.

Allowable Subject Matter


11. Claims 4, 8, 11, and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ronald Abelson
Examiner
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